

the glycosylated [platforms] scaffolds and optionally selectively removing one or more protecting groups on the carbohydrate groups introduced at the first level; whereby a first level library of glycosylated [platforms] scaffolds is created; and then

(b) optionally randomly glycosylating said first level library of glycosylated [platforms] scaffolds, or a combination of first level libraries of glycosylated [platforms] scaffolds, with at least one glycosyl donor, and optionally selectively removing one or more designated protecting groups on the carbohydrate groups introduced at the second level; whereby a second level library of glycosylated [platforms] scaffolds is created.

β^1 cont 2. (Amended) A method according to claim 1, which further comprises further randomly glycosylating said second level library of glycosylated [platforms] scaffolds, or a combination of second level or first and second level libraries of glycosylated [platforms] scaffolds, with at least one glycosyl donor, and optionally selectively removing one or more designated protecting groups on the carbohydrate groups introduced at the third level; whereby a third level library of glycosylated [platforms] scaffolds is created; and optionally repeating the foregoing step to produce fourth and higher level libraries of increased diversity.

β^2 9. (Amended) A method according to claim 1, wherein hydroxyl groups on said glycosyl donors are protected prior to reaction of said glycosyl donors with said [platforms] scaffolds or said glycosylated [platforms] scaffolds.

10. (Amended) A method according to claim 9, wherein said hydroxyl groups are deprotected after reaction with said [platforms] scaffolds or said glycosylated [platforms] scaffolds.

12. (Amended) A method according to claim 1, wherein said [platform] scaffold is a peptide.

β^3 13. (Amended) A method according to claim 1, wherein said [platform] scaffold does not contain peptide linkages.

14. (Amended) A method according to claim 1, wherein said [platform] scaffold comprises natural glycosylation sites.

15. (Amended) A method according to claim 1, wherein said [platform] scaffold comprises unnatural glycosylation sites.

16. (Amended) A method according to claim 1, wherein said [platform] scaffold comprises tandem repeats.

17. (Amended) A method according to claim 1, wherein each glycosylation site on said [platform] scaffold is unique and distinguishable from other sites due to distinct structural features in the vicinity of the site.

18. (Amended) A method according to claim 1, wherein said [platform] scaffold is a hybrid [platform] scaffold comprising a non-peptide polymer to which natural amino acid side chains with natural glycosylation sites are attached.

22. (Amended) A method according to claim 1, wherein said [platform] scaffold is constructed entirely of d-amino acids.

23. (Amended) A method according to claim 1, wherein said [platform] scaffold is linear.

24. (Amended) A method according to claim 1, wherein said [platform] scaffold is cyclic.

25. (Amended) A method according to claim 1, wherein said [platform] scaffold comprises a UV-active or fluorescent label.

26. (Amended) A method according to claim 1, wherein said [platform] scaffold comprises hydrophobic amino acids which increase the solubility of the [platform] scaffold in organic solvents.

β⁵ 28. (Amended) A method according to claim 1, wherein lipid chains are incorporated into said [platform] scaffold.

32. (Amended) A [randomly-generated glycopeptide library] combinatorially-generated library of glycopeptides prepared by randomly reacting a peptide scaffold with either (1) carbohydrate structures associated with human cancer-associated mucins or (2) carbohydrate structures which function as adhesion ligands for bacterial receptors that are expressed on human cell surface antigens.

sub 33. A [randomly-generated] glycopeptide library according to claim 32, [comprising] wherein galactosamine, N-acetyl galactosamine, and sialyl-galactosamine are reacted with a MUC1 core protein to produce a library of carcinoma-associated mucins.

34. A library of glycosylated [platforms] scaffolds produced by the method of claim 1.

β⁶ 35. A library of glycosylated [platforms] scaffolds produced by the method of claim 2.

36. A library of glycosylated [platforms] scaffolds produced by the method of claim 30.

37. A library of glycosylated [platforms] scaffolds produced by the method of claim 31.

sub 38. A method of identifying a biologically-active compound, comprising: generating a library of glycosylated [platforms] scaffolds according to claim 34; and screening components of said library for [drug-like,] competitive inhibitory, immunostimulatory or antibody-like activity.

β⁷ 40. A method of identifying an anti-bacterial compound, comprising:

β^7 cont. generating a library of glycosylated [platforms] scaffolds according to claim 30; and screening components of said library for the ability competitively to inhibit bacterial adhesion to a host cell.

Please add the following claims:

--42. A glycopeptide library according to claim 32, wherein said carbohydrate structures are selected from the group consisting of GalNAc, β Gal(1-3) α GalNAc and sialyl-GalNAc.

β^8 43. A glycopeptide library according to claim 32, wherein the peptide scaffold is a cyclic peptide.

~~44. A glycopeptide library according to claim 32, wherein the peptide scaffold is a core protein of MUC1.--~~
